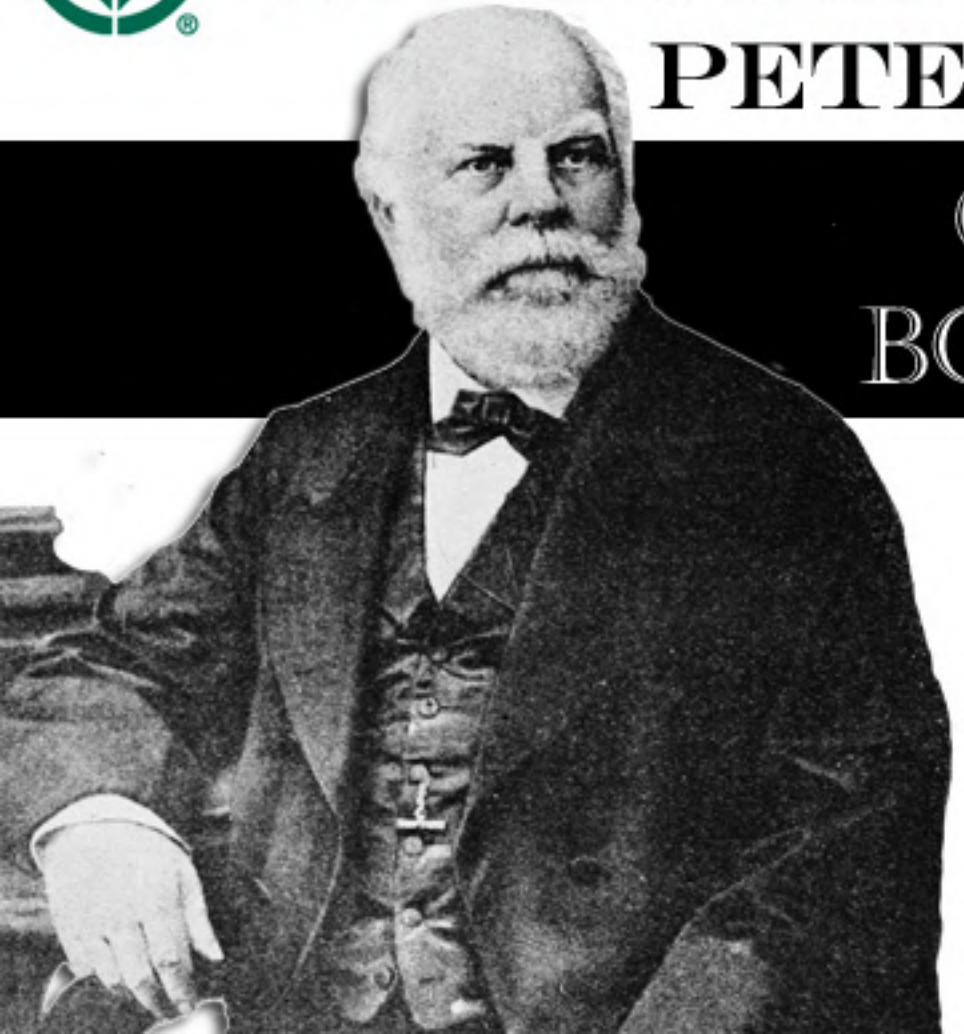
Missouri Botanical Garden

Peter H. Raven Library

George Engelmann Botanical Notebooks



Pagination Note:
Since many of the items lack a specific page number, the page number displayed online refers to the sequentially created number each item was given upon cataloging the materials.

1-12

131 132 133

Chenopodiaceae Phytolacca Batis

Linaria genistifolia Mill

Antirrhinum " L

Spr II, 296
R II, 342

German med. Helvet. Sibir.

A.B. Fr 1825

0055

Chenopodiaceae DC Prod. Vol. 2. 41

I Cyclolobeae

1. Chenopodiaceae fl. homomorphi semper hermaph. fol. sup. semper alt. inf. saepe lata
a. Sem horizontale Beta, Chenopodium
b. Sem verticale Blitum monolepis

2. Spinacieae fl. dimorphi dioici fol. saepe hastata, rarius lata
a. Integum. seminis duplex Atriplex Spinacia
b. Integum. — simplex Grayia Eurotia

3. Camphorosmeae fl. homomorphi hermaph. s. polyg. fol. carnosa teretia s. semiteret.
a. Sem verticale Camphorosma
b. Sem horizontale Kochia Echinopsilon

4. Corispermeae fl. homomorphi herm. fol. linearia coriacea
Corispermum.

5 Salicornieae fl. homomorphi hermaph. — rarius polygami anomali articulata carnosa articulata
Salicornia, Halocnemum, Arthrocnemum.

II Spirolobeae

6 Suaedeae fl. hermaphroditi s. monoici sem integrum duplex Embryo planospiralis
a Sem. verticale Suaeda
b. Sem. horizontale Chenopodina Schoberia

7. Salsoleae fl. hermaphroditi sem. integrum simplex, Embryo conicospiralis
a Sem horizontale Salsola
b. Sem verticale Halimocnemis Noaea Anabasis

8. Sarcobateae fl. dioici heteromorphi Embryo planospiralis (not in DC)
Sarcobatus

Ran Suaedeae are: flores homomorphi, polygamae hermaphroditi, dioici

St. Louis July 7th 65

Dr. Engelmann

Dear Sir

Consider myself hereby

Stated that your services will be desired in a few days

And under and that whether absent from Home office that

You will have over where You may be found. He was

at present at Office of Platte Smith Hand Myers

Yours Truly

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cm
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Sarracenia rubra x4

Dec 60

x6

Top of ament

x4

Scut

Sett.

broader leaf

usual small leaf

usual but very narrow leaf

large broader leaf

largest leaves 3 centimeters 1 1/4 inch

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Sambucus racemosa

Dec. 60

this is the regular shape of upper part of fruit

x 10

x 4 1/2

Ball

x 10

back

Side of anther

Racemose cluster showing the stipe

anther

back

Calyx

x 10

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Atriplex

Salina, N York

Payne 1864

Febr. 2d 1865

deep green

smoothish

X10

large

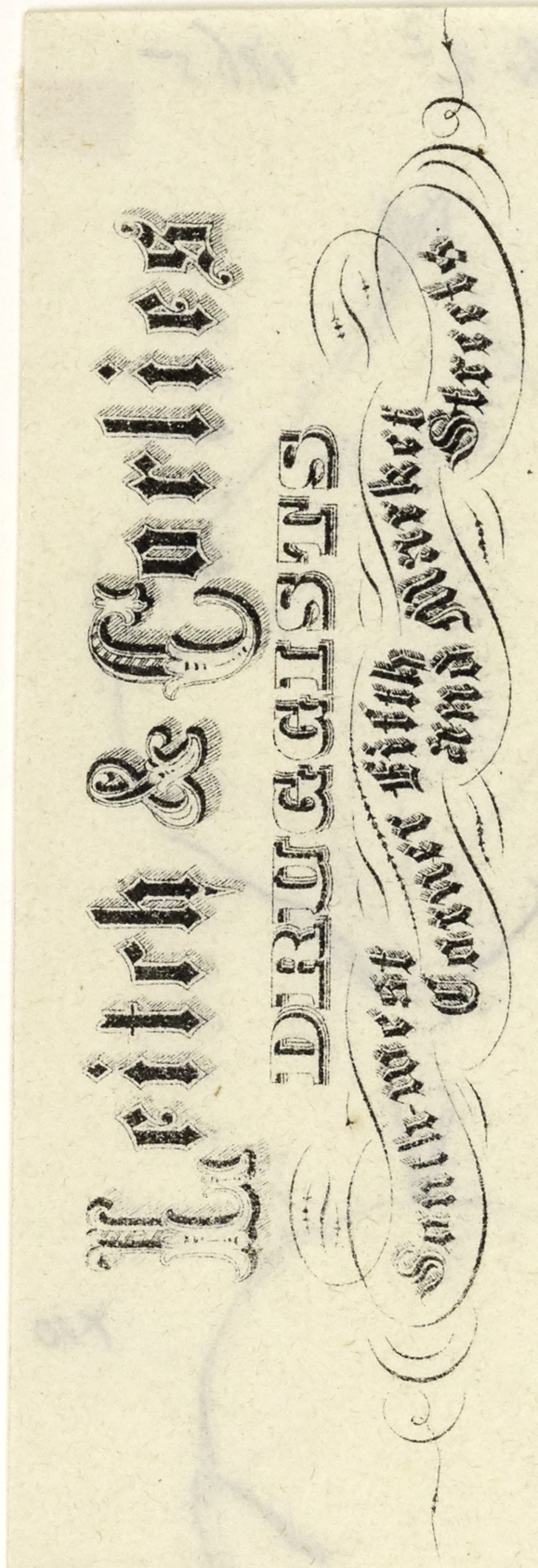
basal

leaf

X10

3 mm diam

3505



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whitish, scurfy

Atriplex

Salina, N York, Payne 1864

Febr 2d 1865

X 10

bracts of different size, including ripe fruit which last is always of same size

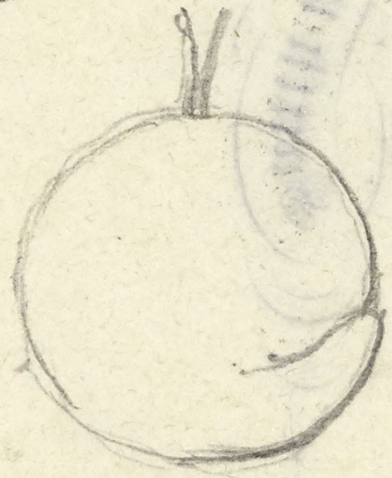
1½ mm diam

X 10

utricles, ripe.

seed black shining smooth

X 10



2 mm diam

smaller

larger bracts

red brown tuberculate

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GEORGE E[illegible]

Smith & Smith
DRUGGISTS
Corner Fifth and Locust Streets
Saint Louis

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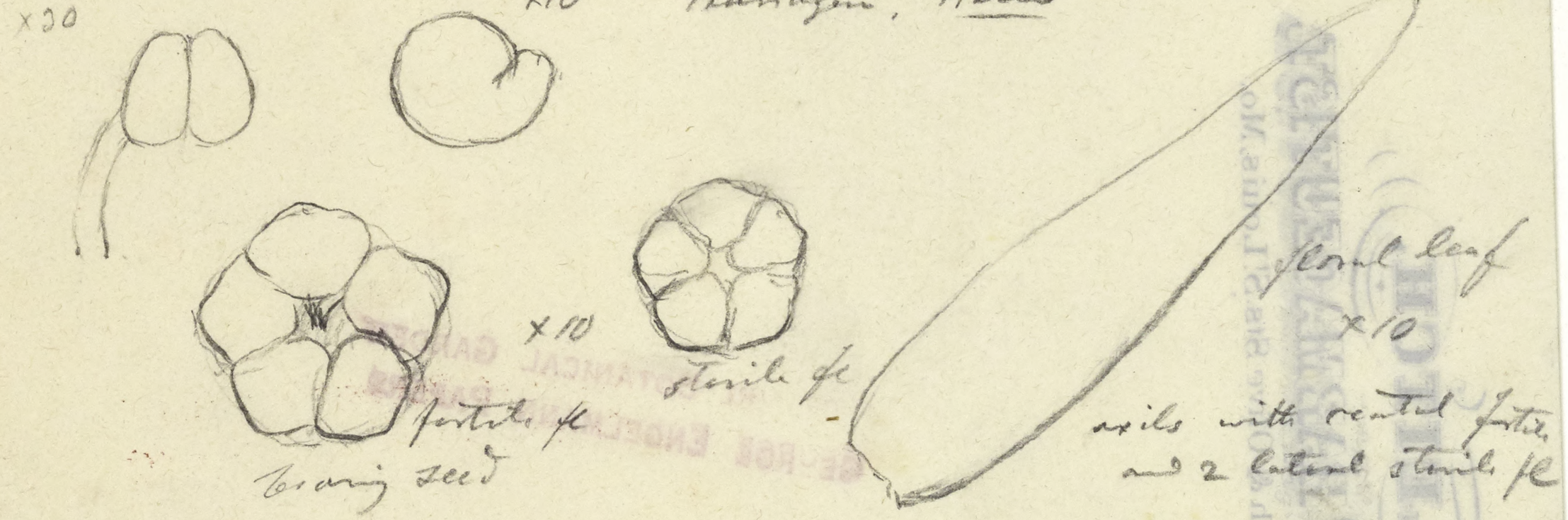
Chenopodium maritimum 14 Aug 1865



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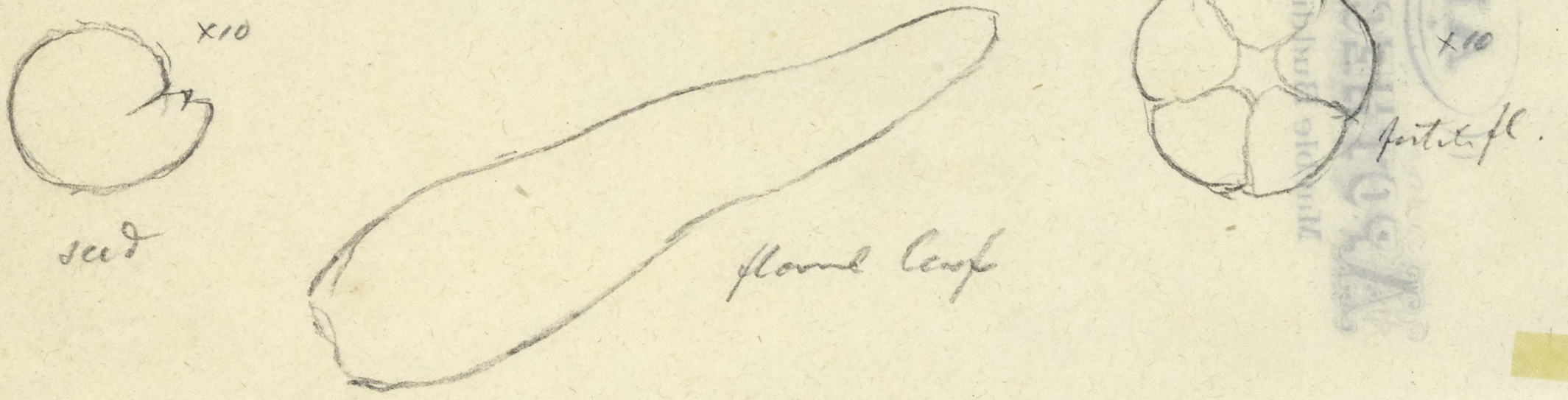
authors same as above

Coast of Baltic



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Chamaedorea fulgrosa 14 Febr 1865

Hamm. Leonorae

× 415

× 10

Pollen

Top

Lateral view

of black shiny seed × 10

ventral

fructiferous

calyx × 10

bracts × 10

orbicular

entire

concave

pistil × 30

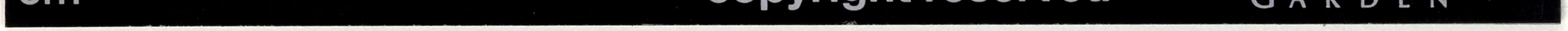
anther × 30

floral leaf

floral leaf

× 10

(vomit! Thysanotus Orchid? never seen otherwise!



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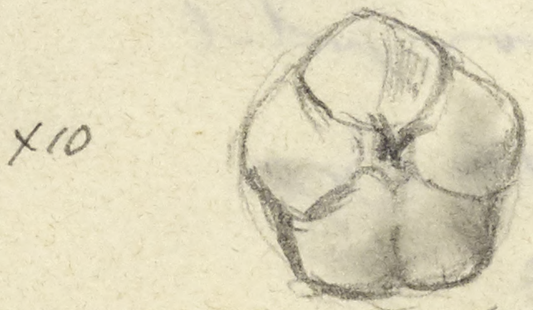
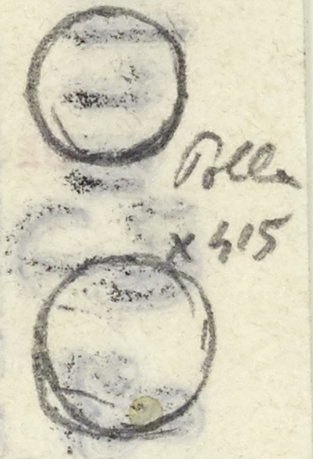
Salvia farinacea var 7 Feb 1865

Fremont. 1st Exp

Yellowstone Hayden

Camp Floyd H Engelm





x10

Hayden
Fort Union

vertical seed

Hayden Fort Union

Cotyledon of Camp Floyd spec

over

Smith & Smiley
DRUGGISTS
Main & Fifth Market Streets
Owensboro, Ky.
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5509

red more frequently horizontal
Fremont 1st Exp.
Camp Floyd
Hayden Yellowstone
more rarely valvate
Hayd Yellowst
— Beavercreek
but more or less fimbriate,
acute or obtuse, membr.
2, 3 or more
Hook leaves abbreviate at base

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Suaeda maritima

Cambridge Mass

Sept 9 1865

×10

floral leaves of different specimens

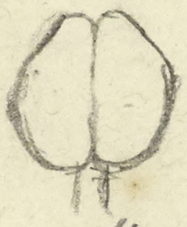
top

side

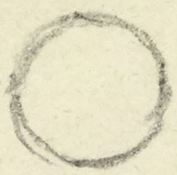
seed horizl

Pistil ×10

Ovate

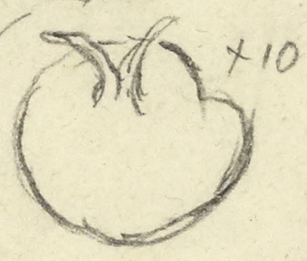


anther ×30



Pollen ×415

S. linearis Ell galveston, Lahai—

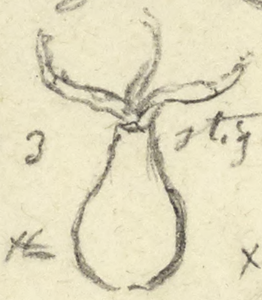


×10

×10

×10

Pollen ×415



usually 3 but one smaller 2 stamens

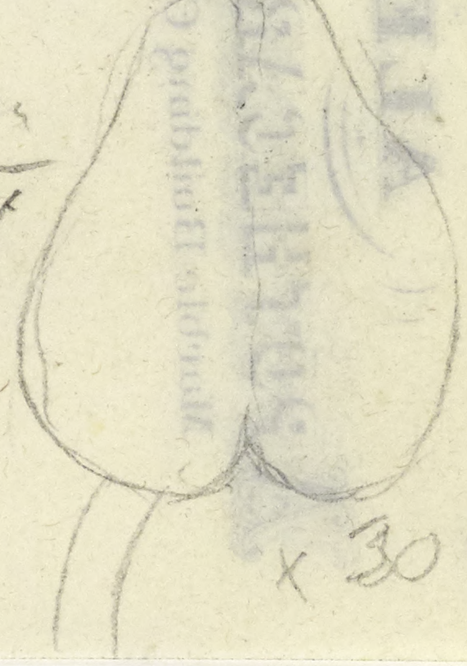
×10

pistil

soon after flow

seed horizontal

×10



×30

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GEORGE ENGELMANN HERBARIUM

5510

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Smilax pulchra var
Bear Creek

Zbr 9 1865

Dr Hayden 1859

x10

hermaphr. flower

with vertical seed & superior radicle
seen only once
(wrongly ?)

with vertical seed inferior rad. usual case

with vertical seed lateral rad

with horizontal seed superior rad

horizontal

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Thumbnail Scanning Courtesy of Missouri Botanical Garden

5511

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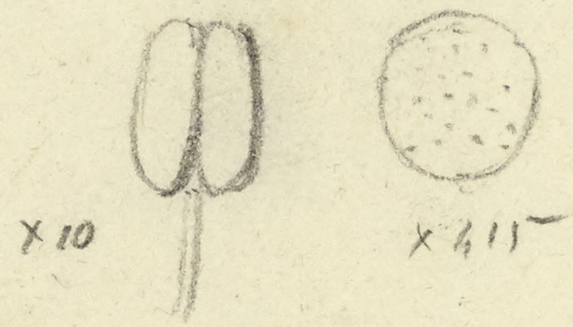
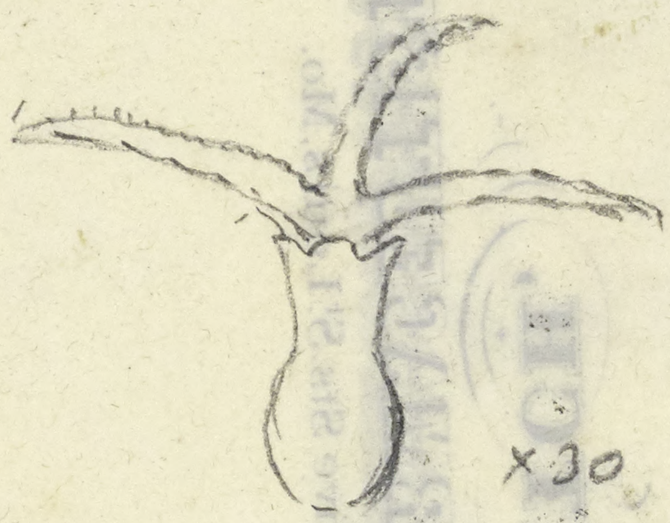
Smilacina puberula var
Sachille Dr Gray 1848

Feb 14 1865





very young pistil

pistil x 30

x10
seed

ethereal seed coat

ovule

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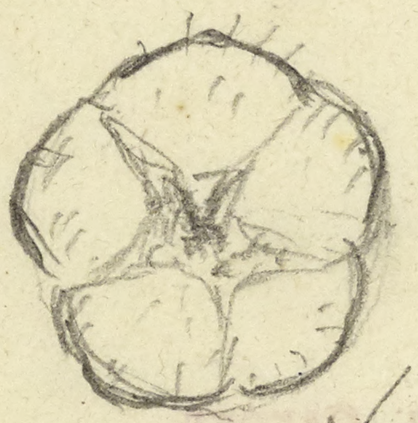
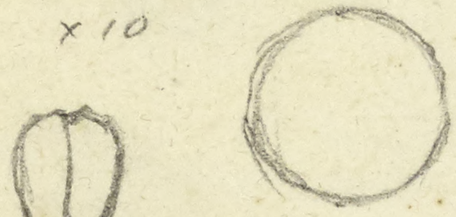
Kochia arenaria Fr 9 Sept 1865

Carson valley

F10



x10



Pollen
x415

hermaphrodite flower, 2-3 in each axil (probably) sterile
with large depressed calyx

polygamo dioecious!
hermaphrodite plant sterile
female plant fertile
with much smaller
subglobose calyx

n

x10

ovary

female flowers on female plant
2 in each axil

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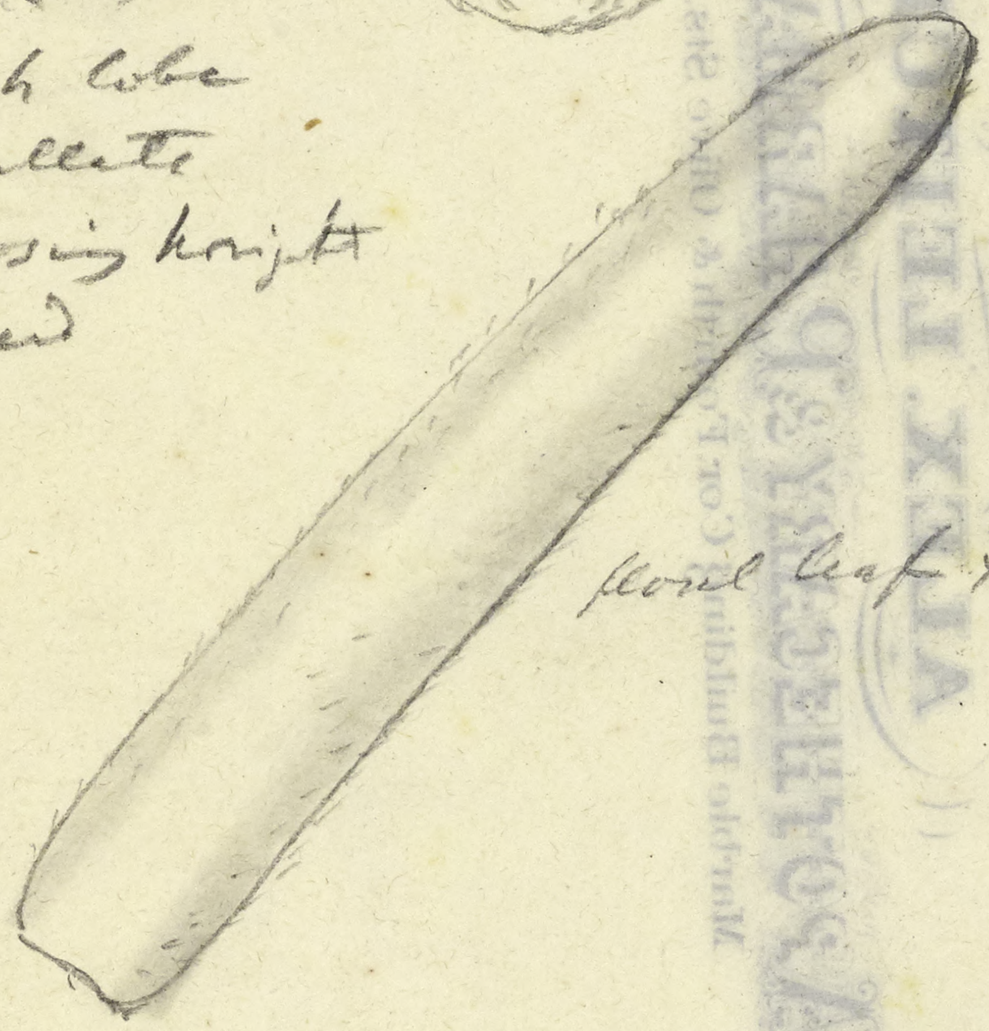
Kochia arenaria tr 8 Jan 1865

on Green River
4 Cyclem x 10

only one fruit in each axil developed the second fem. flower abortive

each lobe annulate inclosing knight seed

fem flower x10



floral leaf x10

x10

seed (unripe)

embryo of unripe seed green no albumen seen (liquid)

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Sclerotinia mucronata

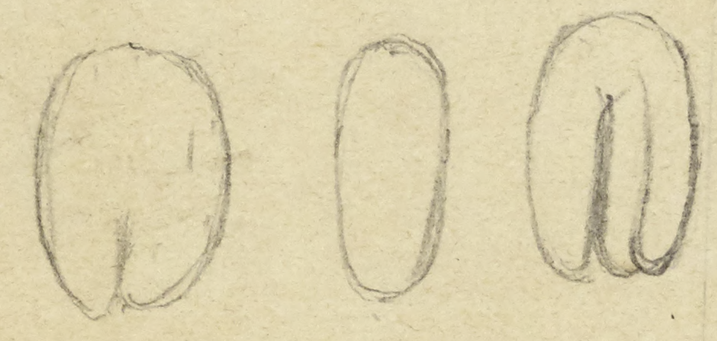
Galveston, Lindheimer

April 8 1865

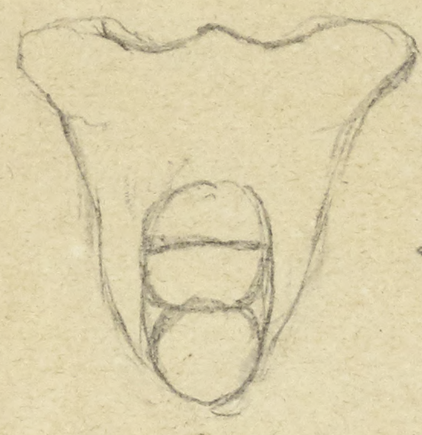
x10

Dorsal

Lateral



sect.



Dorsal

used easily detached from the spongy perizon

FELLOWS & CORIE'S
Patent Improved Manifolding Letter Book
Copying Ink & Copying Paper
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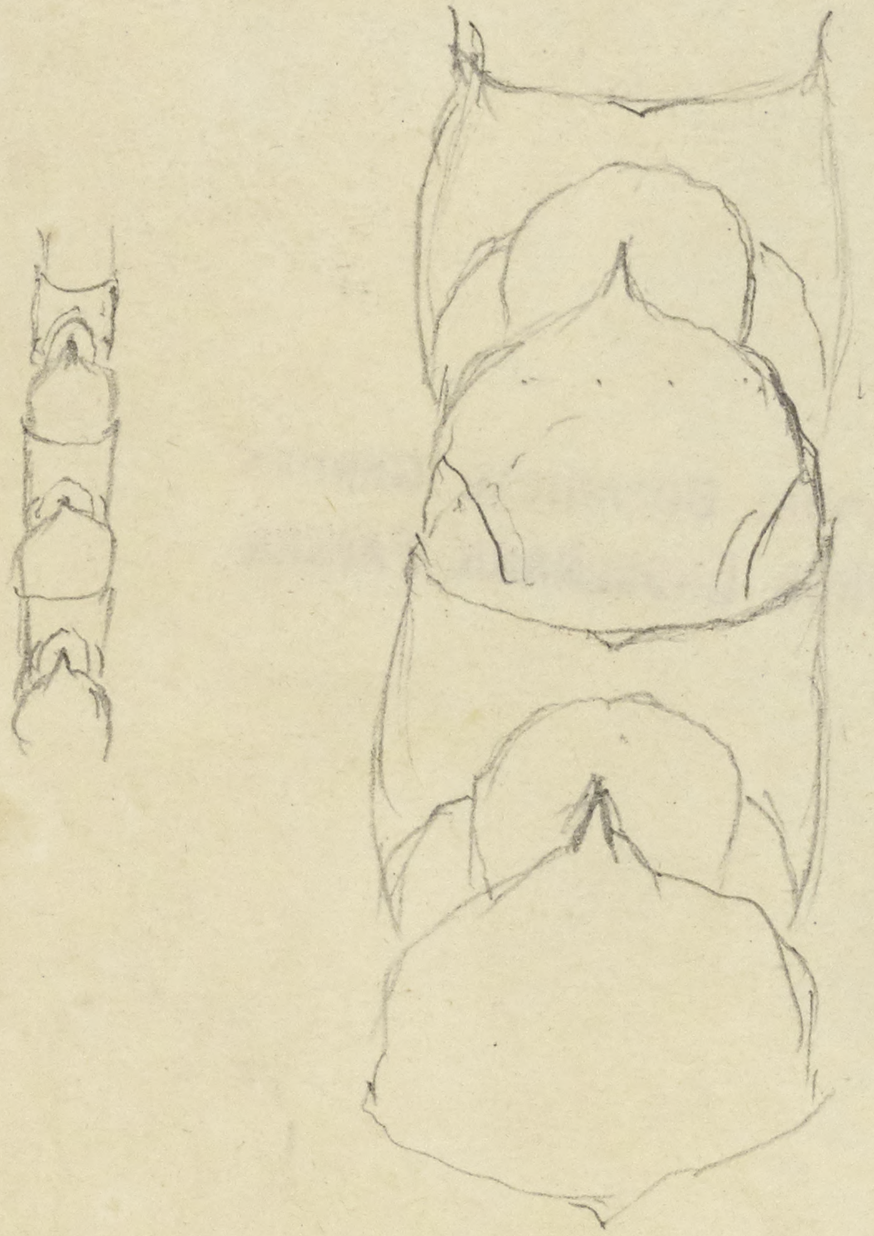

× 4

Salicornia neomexicana

San Diego Bay Nov 4 1880

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Salicornia herbacea

Onondaga Lake – Payne, 1864

April 8 1865

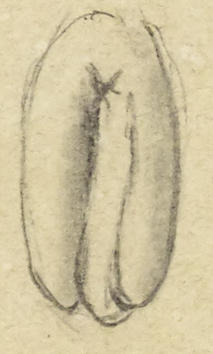
X10

Fruit

dorsal

lateral

inner side of another fruit



Embryo green in albumen seen

outside

inside

Seed of fruit

fruit firmly fixed in juice

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Salicornia herbacea ⑥ Beach Haven
Sept 10 '79

×10

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Solitomia fulvipes.

4

Beech Haven
Sept 10. 1879

× 10

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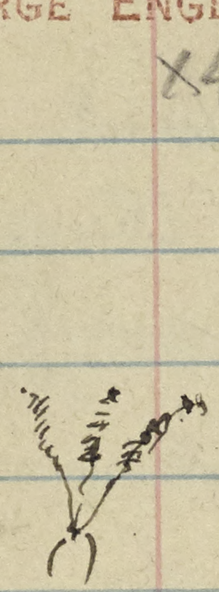
x4



Salicornia pulvinata
Salt marshes, Coos Bay, Oregon
(and Alviso to Ventura
Limits to San Diego)

Aug 13. 1880

3 female flowers under each scale

2 w anthers &c

Parry ch

opponent Saliata?

5520

home

D. 24 dall. sup. corolor, fil. ♂ - anagyris?

M. 25 X-f. fl. mixed Burg.

Do 26 Middle fl. Carolina 21/34 nobilis same

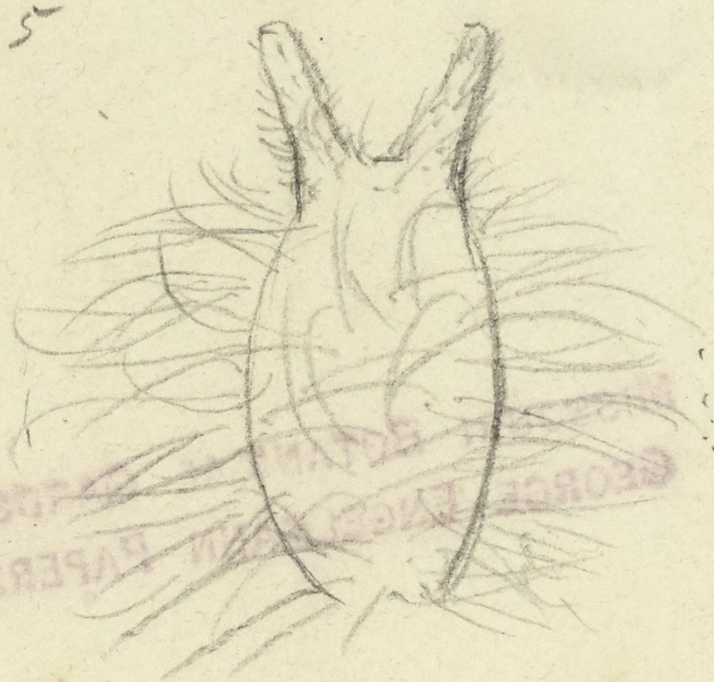
Varrin occidentalis, Silver Meadows

mixed fl.

berries blue black

Cuscuta Cuneata — 1865

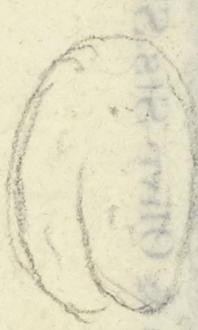
×5



Thecæ

ubstrates

Embryo



Seed, one thin membrane

one in each axil

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cm 0 1 2 3 4 5 6 7 8 9 10
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Pollen ×415

Schoberia Colorado Zuber 6 1865

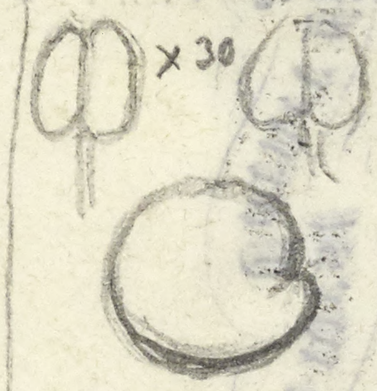
Yellowstone, Hayden

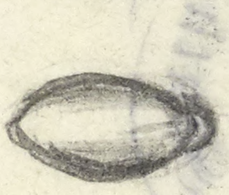
annua

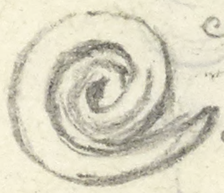
Shienne River, Nebraska,

"Chenopodium leptophyllum"

Colorado, E Hall 488







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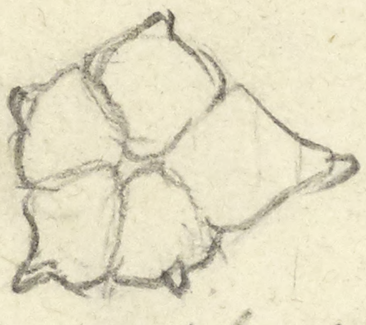

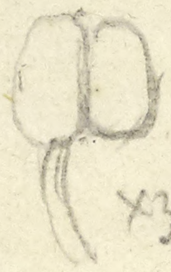

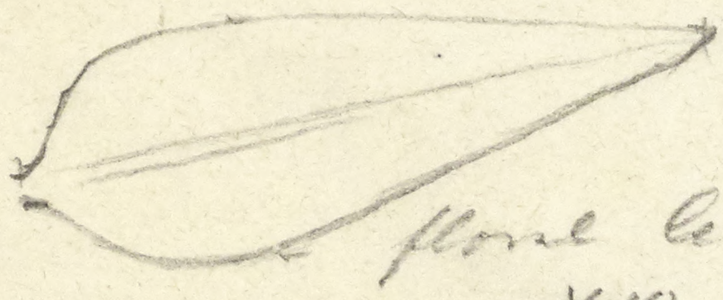

0 1 2 3 4 5 6 7 8 9 10
cm
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MISSOURI BOTANICAL GARDEN

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Smith & Gruia
DRUGGISTS
Corner Fifth and Market Streets

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Scholeria subcoloflora ⊙ anth parv (0.2 mm) stigm erecto
sem horizt – brev, c basi lata, petali
connato – annulari –

Chenopodium– maritimum ⊙ anth parv (0.3 mm) stig– erecto
sem horizt – brev c basi lata connato

Cenop– calyce constata, brev– obtus
Atrip calyce cristat – appl. brev acut

Chenopodium Botrys ⊙ anth majores (1.0 mm) stig– (bi comm
sem horizt – brev. c basi angusta connato divaricat

acut – cal. cristat

Suceda fruticosa (Trauv) ½ anth. magn (1.0 mm) stigmat brev
sem horizt (& vertic) – cal. incappd. –

bracteolis integris brev c basi oblong. obtus.

Suaeda multiflora Torr ½ anth magn (1.0–1.1) stigm. divaricat
sem horizt s. vertic cal incappd brevi connat

bracteolis dentriculatis ciliatis / brev c'nervibus basi fere in spatiol affert. acutis

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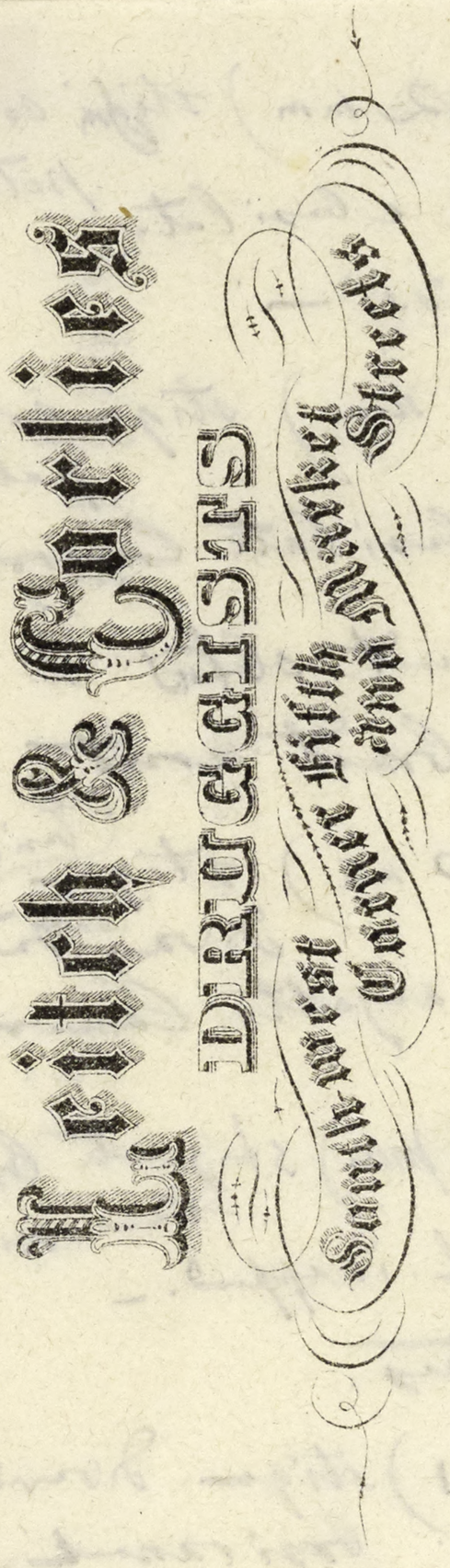

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Phytolacca dioica in Hort bot Rome

15 years old, trunk 4½ feet diam-
roots spreading largely over and on the
Grd, very thick -

Aug 25 immature

was at first a
purely female plant
but produced also
male flowers, and fertile
seeds.

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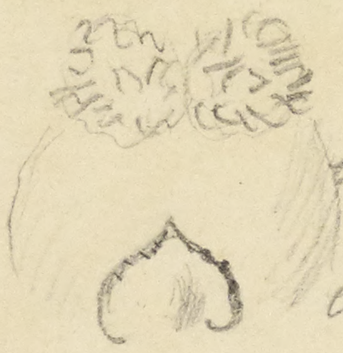
San Diego Nov 5 '80

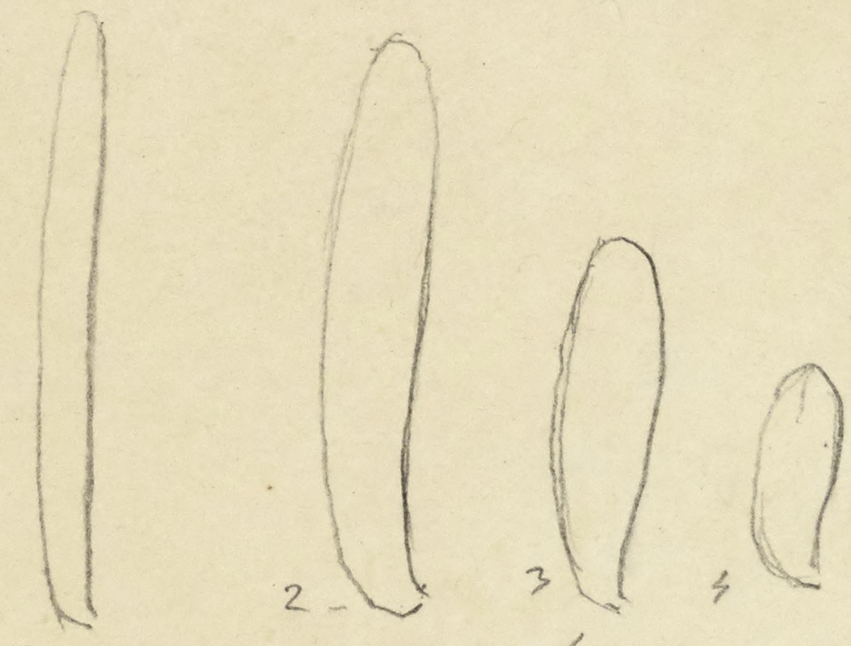
Batis maritima

San Diego Bay Nov 4 1880



2 stigmas
belonging
to
bract

fruiting spikes (seeds abortive



1 2 3 4

usual form of leaves

sections

male spike
of about 20 flowers

anthers just opening

scale

stipes two long

no rudimentary pistil
seen

I have seen only one calyx scale
or bract? Torrey speaks of
two. Closer observation
necessary

top view of ♂

bract.

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